DYNATRON "TOURIST" Model TP14

General Description: Six-transistor (plus crystal diode), two-waveband, personal receiver with optional leather carrying case.

Power Supply: 9-volt battery (type PP4 or equivalents).

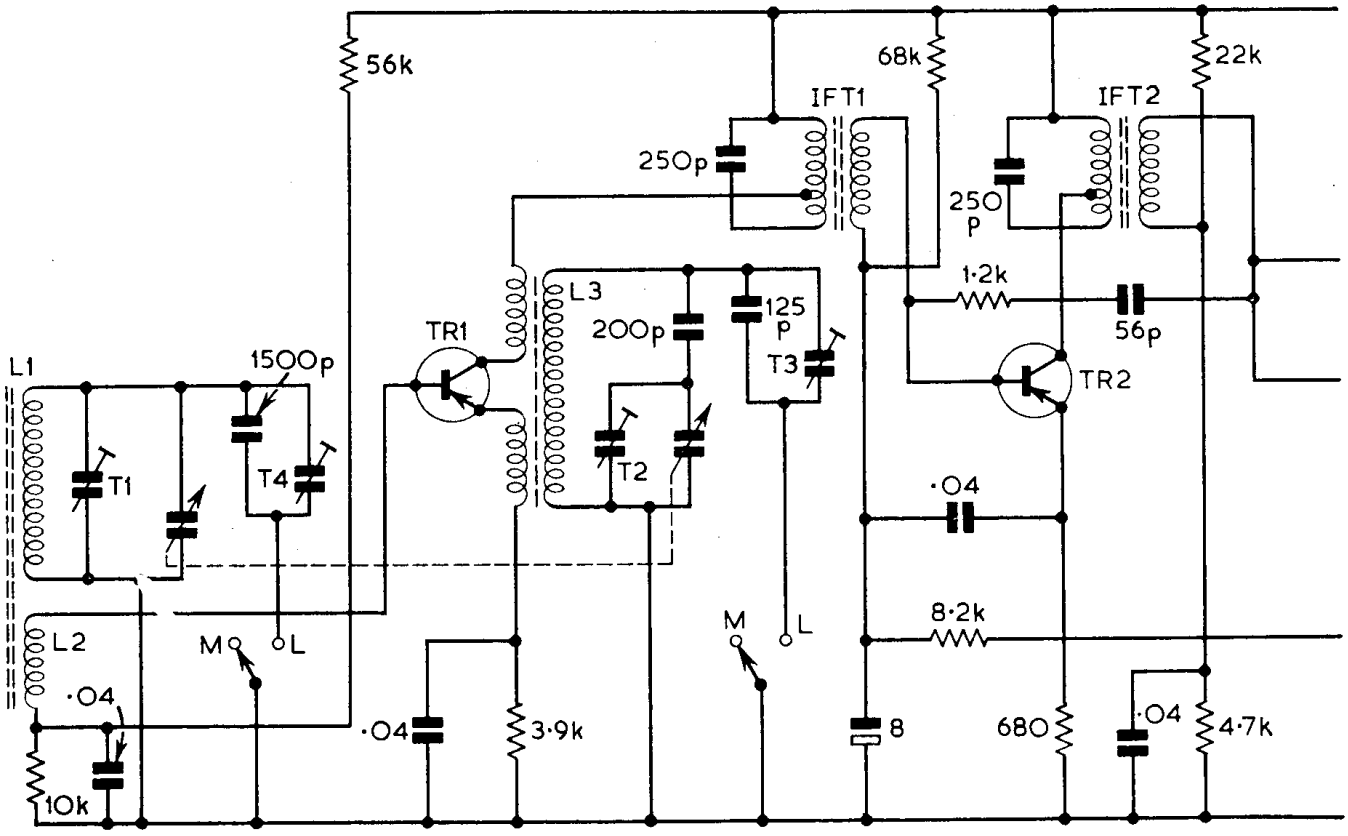
Wavebands: M.W. 190–490 m.; L.W. 1500 m. (pre-tuned).

Transistor Analysis: Measurements taken on 20,000-ohms/volt meter under no-signal conditions. Voltages negative with respect to chassis.

Transistor		*Function*	*Collector, volts*	*Base, volts*	*Emitter, volts*
TR1	OC44	Freq. changer	7·2	1·3	1·4
TR2	OC45	1st I.F.	7·1	0·7	0·6
TR3	OC45	2nd I.F.	7·1	1·05	0·9
TR4	OC78D	A.F. driver	8·6	1·6	1·4
TR5, 6	OC78	Push–pull output	8·9	0·2	—

Crystal diode Type OA70.

Dismantling: The rear cover can be removed after unscrewing coin-slotted disc. Disconnect battery. Remove centre of tuning knob by means

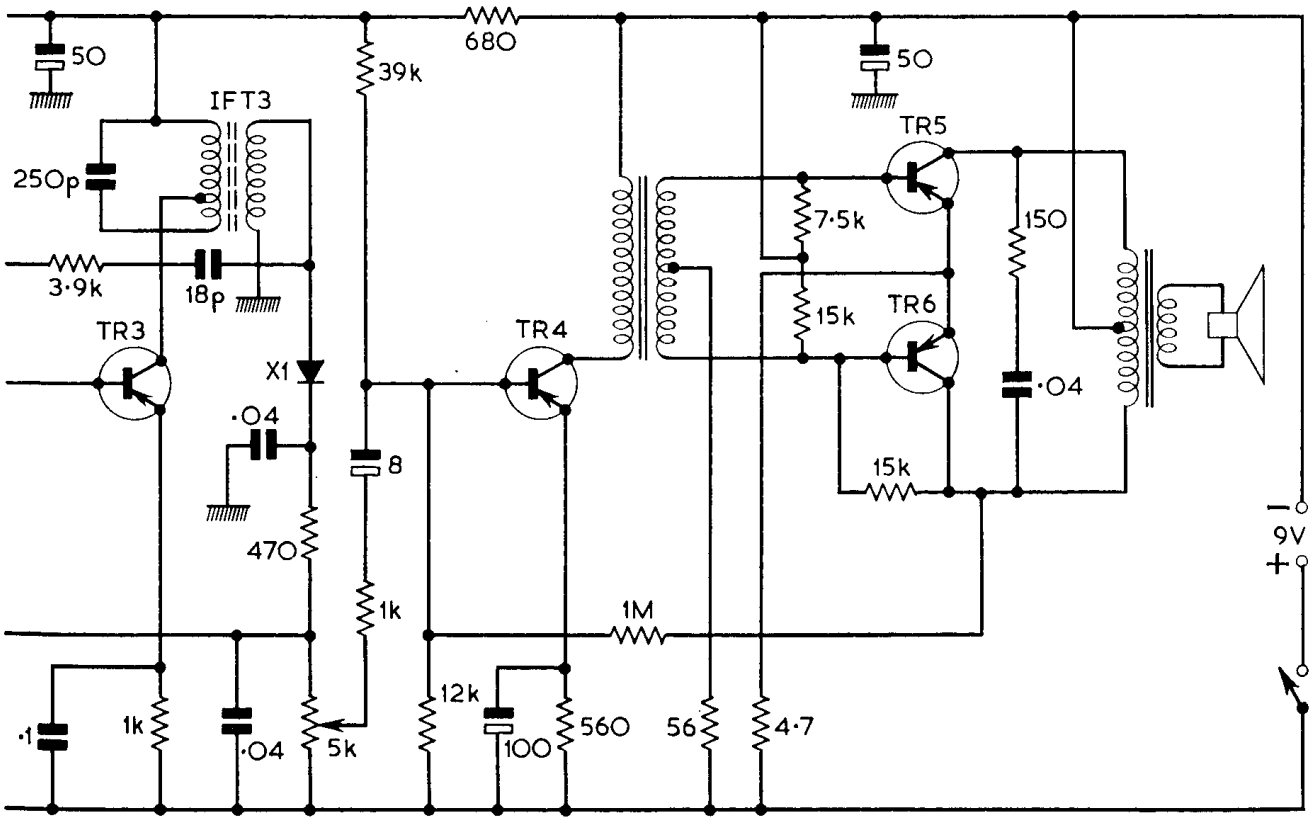


CIRCUIT DIAGRAM—

of a pair of tweezers or other suitable two-pronged tool. On removing plastic parts of knob, three 4 B.A. screws will be found, securing tuning gang to cabinet. When these screws have been removed the chassis can be withdrawn as far as the speaker leads permit. When reassembling take care that the lugs at the battery end of the casing engage in the slots in the cover.

Modification: In some models the resistor from the centre tap of the secondary of the driver transformer to chassis is 33 ohms instead of 56 ohms.

Alignment Procedure: During I.F. alignment signals should be injected across secondary winding of L1 with a 0·1-μF. capacitor in each generator lead. For R.F. alignment a standard radiating loop should be used inductively coupled to the aerial rod and about 1 ft. away. Keep output during alignment below 50 mW. (0·4 volt r.m.s. across 3 ohms). *I.F.:* Set to about 430 m., inject a 470-kc/s. signal and adjust IFT3, IFT2 and IFT1. *R.F.:* Inject a 700-kc/s. signal and tune to 428 m. Adjust core of L2 and if absolutely necessary adjust L1 on aerial rod. Inject a 1200-kc/s. signal, tune to 250 m. and adjust T2 and T1. Repeat this sequence of operations slightly rocking tuning gang to reduce pulling. *L.W.:* Turn tuning control to L.W. position. Inject a 200-kc/s. signal (or use Droitwich transmitter) and adjust T3 and T4.



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